

Restoration Coordination Program Status of Projects and Programs

September 3, 1999

Fund	Total Amount Appropriated	Funds Approved for Projects ¹	Projects Under Contract	Funds Expended to Date
Federal Bay-Delta Act 1998	\$85 million	\$ 85 million (88 projects)	\$ 76 million	\$ 10.8 million
Federal Bay-Delta Act 1999	\$75 million	\$ 75 million (32 projects)	\$ 29.9 million	\$ 0
Prop 204 Category III	\$60 million	\$ 55.1 million (69 projects)	\$ 37.7 million	\$ 12.6 million
EPA Watershed	\$2 million	\$ 2 million (4 projects)	\$ 2 million	\$.4 million
CUWA	\$32 million	\$ 29 million (44 projects)	\$ 21.5 million	\$ 14 million
TOTAL	\$ 254 million	\$ 246 million (237 projects)	\$ 167.1 million (68%)	\$ 37.8 million (15%)

¹This column includes projects funded under specific programs.

Tracking Table for Ecosystem Restoration Projects

September 3, 1999

CALFED No.	Project Description	Project Category	Applicant	Geo Area	CALFED Approved Funding	CALFED Funds Obligated	CALFED Funds Expended	CALFED Funds	Other Funding	Acres	Monitoring	Status
97-C01	Fish Screen Passage	RD 108	Sacramento		\$2,500,000	\$2,500,000	\$2,500,000	\$2,500,000			Reduce entrainment of outmigrating fish. Measure screen approach, sweep, and bypass. Contract 5 rncs. Through 12/31/99. Right water levels have been delayed completion of construction until Fall 1999.	Fully executed 7/16/99 - Construction 95% complete. Completed Amendment to extend contract 5 rncs. Through 12/31/99. Right water levels have been delayed completion of construction until Fall 1999.
97-C02	Fish Screen Passage	RD 104	Sacramento		\$1,750,000	\$1,750,000	\$1,699,027	\$544,000	\$2,675,000		Reduce entrainment of outmigrating and resident fish. Measure screen approach, sweep, complete & other work is proceeding.	Fully executed 9/22/98. Construction complete. Finished start-up testing.
97-C03	Watered management planning for Sacramento River Riparian Program	Management	Sacramento		\$200,000	\$200,000	\$200,000	\$0	\$0		Finalize the riparian group in development of watered plan. Reduction and extent of implementation activities. Protect and enhance riparian habitat. Measure riparian density and species composition, pre and post project.	Fully executed 8/16/98. DWR completed subcontract with Chico State for the program.
97-C04	Selected fish screens	Fish Screen Passage	DWR	Sacramento	\$445,250	\$374,850	\$28,955	\$0	\$0		Reduce entrainment of outmigrating and resident fish. Measure screen approach, sweep, complete & other work is proceeding.	Fully executed 9/22/98. Construction complete. Finished start-up testing.
97-C04B	Selected fish screens	Fish Screen Passage	DWR	Sacramento	\$2,794,500	\$0	\$0	\$0	\$161,000		Reduce entrainment of outmigrating fish. Measure screen approach, sweep, and bypass. OFG cannot contract for fish screen construction over \$500,000. Sustain marsh screens until a new project proposal has been selected and project plans completed. Other work is proceeding.	Fully executed 9/22/98. Construction complete. Finished start-up testing.
97-C05	Effects of wetlands restoration on methyl mercury levels	Water Quality and Temperature	UC Davis	Delta	\$545,171	\$545,171	\$545,171	\$68,602	\$0		Evaluate relationship of physical, chemical and biological gradients on methyl mercury production and bioaccumulation. Sample levels of mercury in biodegradable species from various sites in the Delta. Sample sediment cores from various sites and locations in the Delta will be used in mercury methylation experiments.	Fully executed 9/24/98. Completed purchase of mercury analyzer have vented analytical methods-field sampling & have started analyzing field samples ongoing to calibrate of various sites in the Delta. Sample sediment cores from various sites and locations in the Delta will be used in mercury methylation experiments.
97-C06	Contaminant effects on smelt	Water Quality and Temperature	UC Davis	Delta	\$437,326	\$437,326	\$5,112	\$0	\$0		Evaluate the potential impact of contaminants on Delta smelt. Obtain samples and evaluate using histopathology, genetic and otolith analysis. Evaluate exposure of smelt to chemical contaminants found in Delta.	Fully executed 11/2/98.
97-C07	Preventing exotic introductions from ballast water	Introduced and Unstable Species	UC Sea Grant	North Bay	\$222,830	\$222,830	\$19,236	\$0	\$83,895		Increase marine inventory members' awareness of ballast release issues and alternative procedures to reduce new introductions into the Delta. Participate in use and effectiveness surveys.	Fully executed 8/24/98. Project delayed until 2/99 due to starting problems. Work on procedures to reduce new introductions into the Delta. Participate in use and effectiveness surveys.
97-C08	San Joaquin River real-time water quality management program	Water Quality and Temperature	DWR	San Joaquin	\$932,000	\$931,857	\$0	\$0	\$0		Increase water user awareness of real time data and its beneficial use. Survey participation, use of data base and changes in load and adjustments. Reduce water quality excursions in the SJ Delta system as real time data is utilized. Measure water quality conditions and variances over time. Monitor New Mexico water operations for net decrease in releases following forecast.	Fully executed 3/30/99. Completed sub-contract for the project.
97-C09	Developing a genetic baseline for San Joaquin salmon	Fish Management	DWR	San Joaquin	\$387,003	\$387,003	\$4,095	\$0	\$609,000		Issue samples for genetic baseline of SJ Fall run chinook salmon. Collect and analyze tissue samples from populations over 3 year period.	Contract fully executed by 2/1/99. Project has been delayed & they have requested a time extension. Genetic analysis started Aug 1999.
97-C11	Gravel at Basco Bridge	Habitat Restoration in Wetlands	DWR	Tulare River	\$250,975	\$250,975	\$4,095	\$0	\$22,100		Improve the quality and quantity of spawning habitat, use, and durability. Roads survey. Monitor channel and geomorphic characteristics (beds counts, bank samples, profiles), pre and post project.	Fully executed 1/5/99. Permit application complete & allowed receive approval soon.
97-C12	Evaluation of alternative pesticide use reduction practices	Water Quality and Temperature	UC Davis	Landscapes	\$957,781	\$957,781	\$76,764	\$0	\$746,827		Monitor water quality before and after outreach program to determine efficiency of pesticide reduction practices. Monitor stream habitat, Monitor biomass accretion and deposition of sediment over time, and costs.	Fully executed 8/26/98. completed Task Order for year 1 week 11/1/98. Development of Alternative Pesticide Baseline 5% complete.
98-C01	Twilight Island Sublethal Study	Habitat Restoration in Wetlands	DWR	Delta	\$3,583,000	\$3,583,000	\$0	\$0	\$0		Evaluate techniques to reverse the subsidence of Delta Island habitat. Monitor biomass accretion and deposition of sediment over time, and costs.	Fully executed 8/20/99. Completed sub-contract for the project. Work will begin in September 1999.
98-C02	Culture of Delta Smelt	Fish Management	UC Davis, Animal & Sciences	Delta	\$194,970	\$194,970	\$143,495	\$0	\$0		Develop culture methods to supply all the stages of delta smelt for research studies.	Fully executed 8/10/99. Physical improvements to site completed. Testing & delta water supply with larval fish. Bloodfish collection & water culture complete. Larval & juvenile rearing progressing. Final report of 1st year due Sept 1999.
98-C03	Habitat restoration planning	Habitat Restoration in Wetlands	UC Coastal Wetlands	Northbay	\$1,000,015	\$1,000,015	\$458,923	\$0	\$1,324,000		Restore sublethal dried area to upland seasonal and tidal wetland habitat. Monitoring of site physical characteristics (elevation, contours, etc.) and hydrology. Water quality monitoring (salinity, temperature, and DO). Monitor vegetation development (extent, location, composition, and density). Survey of use by fish and wildlife.	Fully executed 10/28/98. Completed the EIR/EIS. Habitat Conceptual Restoration Plan. Monitoring of site physical characteristics (elevation, contours, etc.) and hydrology. Water quality monitoring (salinity, temperature, and DO). Monitor vegetation development (extent, location, composition, and density). Survey of use by fish and wildlife.
98-C04	Marced River Ranch acquisition and restoration	Habitat Restoration in Wetlands	DWR	Marced River	\$658,000	\$658,000	\$0	\$0	\$45,500	42	Protect and enhance riparian, wetland and aquatic habitat, and provide supply of gravel for spawning habitat projects.	Continued with 98-C05 Basco Bridge land acquisition.
98-C05	Basco Bridge land acquisition	Habitat Restoration in Wetlands	DWR	Tulare River	\$172,500	\$172,500	\$0	\$0	\$0	318	Protect spawning riffles, and protect and enhance riparian species.	Property appraisals.
98-C06	Water Quality Criteria for Chironomids and Benthon (Designated Action)	Water Quality and Temperature	DWR	Landscapes	\$170,000	\$67,753	\$0	\$0	\$0		Develop water quality criteria for chironomids and benthon. Conduct toxicity test on chironomids and pycna.	Contract fully executed 3/5/99. Have completed several toxicity tests. First toxicity reports due Sept 1999.
98-C07	Faded Minnow Toxicity	Water Quality and Temperature	CVRWCB	Landscapes	\$400,000	\$400,000	\$0	\$0	\$0		Evaluate toxicity and water quality in the Delta. Collect samples quarterly from various (faded minnow larval growth and survival, otoliths reproduction).	Contract fully executed 2/5/99.
98-C08	Algal Toxicity	Water Quality and Temperature	CVRWCB	Landscapes	\$500,000	\$500,000	\$0	\$0	\$0		Evaluate toxicity and water quality in the Delta. Collect samples quarterly from various river and slough sites in the Delta for subsequent lab testing for contaminants and toxicity.	Contract fully executed 2/5/99.
98-C09	Water Quality and Temperature	Water Quality and Temperature	DWR	Delta	\$24,000	\$24,000	\$0	\$0	\$0		Determine toxicity criteria and sediment reuse potential to develop a Delta Draining Reuse Strategy. Will monitor sediment constituents as pilot projects are developed.	Contract fully executed 4/16/99. DWR is developing a Technical Advisory Panel.
98-C09b	Sediment Water Quality	Water Quality and Temperature	DWR	Delta	\$276,000	\$276,000	\$0	\$0	\$0		Same as 98-C09a	Fully executed 3/30/99. Signed risk order for year one work.

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98-C09c	Sediment Water Quality	Water Quality and Temperature Improvement	RWQC	Delta	\$200,000	\$200,000	\$0	\$0	\$0		Same as 98-C09a	Fully executed 6/3/99. Signed task order for year one work.
98-C10	CWARP DA	Habitat Restoration in Floodplains & Marshes	DWR	Landscape	\$800,000	\$800,000	\$0	\$0	\$0		Develop a Comprehensive Monitoring and Research Program for CALFED.	Fully executed 5/4/99. Initial report complete. Refining report and expanding their role.
98-C11	Chinook Salmon Movement in the Lower SJR and South Delta	Fish Management Hatchery	DFG	San Joaquin River and Delta	\$285,000	\$285,000	\$0	\$0	\$0		Evaluate fish migration and delays through lower San Joaquin River and south Delta as potentially impacted by South Delta Temporary Barriers, Head of Old River Barrier and/or low DO levels. Track movement of ultrasonic tagged adults.	Fully executed 6/2/99. Due to delays in obtaining equipment project will require time extension.
98-C12	Genetic Comparison of Steelhead Stocks in Clear Creek	Fish Management Hatchery	USFWS	Clear Creek	\$45,450	\$0	\$0	\$0	\$0		Evaluate alternative steelhead stocks for future restocking of Clear Creek. Collect tissue samples for genetic evaluation.	Contract sent to contractor for signature 5/4/99.
98-C13	Spawning Areas of Green Sturgeon in the Upper Sacramento River	Habitat Restoration in Floodplains & Marshes	USFWS	Sacramento River	\$60,601	\$0	\$0	\$0	\$0		Characterization of Green Sturgeon habitat and life history patterns in the upper Sacramento River. Survey of spawning areas.	Contract sent to contractor for signature 3/19/99.
98-C14	Monitoring Spring and Winter-run Chinook Salmon and Steelhead in Battle Creek	Fish Management Hatchery	USFWS	Battle Creek	\$150,000	\$0	\$0	\$0	\$0		Evaluate life history characteristics for spring and winter run chinook and steelhead in Battle Creek. Fish counts, snorkel surveys, juvenile monitoring using screw traps. Genetic data for species.	Contract sent to contractor for signature 5/20/99.
98-C15	Biological Assessment of Green Sturgeon in the Sacramento-San Joaquin Watershed	Fish Management Hatchery	UC Davis	Sacramento-San Joaquin Watershed	\$241,000	\$241,000	\$684	\$0	\$0		Identify the biological characteristics of green sturgeon. Behavioral and tolerance limits to temperature ranges for various size fish. Biological examination of reproduction system and function. Genetic data for GS and white sturgeon. Examine Embryo samples to measure developmental process over time and varying river conditions.	Contract fully executed 3/30/99. Work on all tasks has begun.
98-C16	Developing a Methodology to Accurately Simulate Entrainment of Fish	Fish Screen Passage	DFG	Delta	\$200,000	\$0	\$0	\$0	\$0		Evaluate effectiveness of barge sampling in estimating existence of fish at/near diversion locations. Perform fish-friendly pump sampling and diversion net sampling at various times.	Contractor has completed review & was received at DFG contract office 5/25/99. In the budget office.
99-C01	Cosumnes River Feasibility Study	Habitat Restoration in Floodplains & Marshes	The Nature Conservancy	Cosumnes River	\$400,000	\$0	\$0	\$0	\$0		Feasibility Study of Ecosystem Restoration opportunities on the Cosumnes River.	Contract to contractor for signature 5/20/99. Waiting for completion of final study plan to finalize their role in implementing the plan.
99-C02	Mokelumne River Feasibility Study	Habitat Restoration in Floodplains & Marshes	EBMUD	Mokelumne River	\$400,000	\$400,000	\$0	\$0	\$0		Feasibility Study of Ecosystem Restoration opportunities on the Mokelumne River.	Contract fully executed 4/20/99. They are completing a final study plan for the project.
				Total: \$	\$21,075,619	\$17,360,931	\$4,525,971	\$4,344,000	\$5,628,312			
				32		82%	21%					91%
				Contracts		Obligated	Expended					Executed
Contract Agency: National Fish and Wildlife Foundation (Prop 204 funds)												
97-N01	Assessment and Implementation of urban waste reduction of dioxin and chlorpyrifos (Sacramento County)	Water Quality and Temperature	Sacramento Area Stormwater Permittees	Sacramento Mainstem	\$603,500	\$663,500	\$64,414	\$0	\$193,000		Characterize baseline temporal and spatial trends of OP Pesticide runoff in the Sacramento region. Concentration during various conditions and at various locations pre project. Evaluate effect of OP Pesticide control program on the water quality conditions. Concentration during various conditions and at various locations post project. Evaluate if the level/conditions are significant contributors to toxicity. Ceriodaphnia toxicity tests.	Contract signed 8/29/98, received QA/QC, need to review 2 draft subcontracts.
97-N02	Sacramento River floodplain acquisition and riparian restoration	Habitat Restoration in Floodplains & Marshes	WCB, USFWS, The Nature Conservancy	Sacramento Mainstem	\$9,879,800	\$9,879,800	\$8,066,214	\$0	\$0	1,500 ¹	Increase extent of channel meander and flood zones. Mapping of aquatic and terrestrial habitats. Increase native riparian growth and reduce exotic distribution adjacent to the river. Measure tree density and species composition and height, pre and post project. Measure exotic weed cover, pre and post project. Measure flow litter quality and quantity to evaluate accumulation and Carbon/Nitrogen ratios, pre and post project. Conduct point counts and areas searches for songbird populations and habitat characteristics as indicator of ecological health. Groundwater piezometers samples for evaluating water quality adjacent to restoration area, pre and post project and adjacent sites.	Contract signed 2/4/99. First property purchase in escrow.
97-N03A	Sacramento River acquisition and riparian forest restoration	Habitat Restoration in Floodplains & Marshes	USFWS, The Nature Conservancy	Sacramento Mainstem	\$780,000	\$780,000	\$1,435	\$0	\$0	300 ²	Same as 97-N02	Contract signed 12/8/98.
97-N03B	Sacramento River floodplain acquisition and riparian restoration	Habitat Restoration in Floodplains & Marshes	WCB	Sacramento Mainstem	\$512,500	\$512,500	\$0	\$0	\$0	See 97N03A	Same as 97-N02	Contract executed.
97-N04	Sacramento River meander restoration	Habitat Restoration in Floodplains & Marshes	The Nature Conservancy	Sacramento Mainstem	\$898,700	\$898,700	\$816,800	\$0	\$0	95	Same as 97-N02	Contract signed 10/28/98. Property purchased. Completing subcontracts for site preparation and planting.
97-N05	Restoration planning (M and N Fork American River, Auburn Ravine, Coon Creek)	Habitat Restoration in Floodplains & Marshes	Placer County	American River	\$222,530	\$222,530	\$0	\$0	\$222,530		Evaluate restoration needs toward the protection and improvement in water quality, aquatic habitat and its accessibility, and riparian communities.	Contract executed 3/29/99.
97-N06	Butte Creek acquisition and riparian restoration	Habitat Restoration in Floodplains & Marshes	CSU, Chico	Butte Creek	\$187,128	\$187,128	\$0	\$0	\$135,000	90 ²	Protect riparian habitat. Monitor revegetation. Similar to 97-N02.	Contract signed 12/21/98.
97-N07	Cottonwood Creek channel restoration planning (Habitat Restoration in Floodplains & Marshes	Graham Matthews & Associates	Cottonwood Creek	\$61,000	\$61,000	\$20,081	\$0	\$10,000		Describe geomorphic conditions and changes in region toward development of channel and riparian restoration plan. Survey of geomorphic and riparian characteristics, current and historical, and eventually post project.	Contractor signed 7/1/98. Work is ongoing.
97-N08	Lower Mill Creek riparian restoration	Habitat Restoration in Floodplains & Marshes	Mill Creek Conservancy, The Nature Conservancy	Mill Creek	\$69,000	\$69,000	\$1,899	\$30,000	\$109,670	3	Increase native riparian growth adjacent to the river. Measure tree density and species composition and height, pre and post project.	Contract signed 12/25/98.
97-N09	Monitoring of Delta contaminants	Water Quality and Temperature	San Francisco Baykeeper	Delta	\$100,000	\$100,000	\$35,858	\$0	\$20,000		Evaluate toxicity and water quality in the Delta. Collect samples quarterly from various river and slough sites in the Delta for subsequent lab testing for contaminants and toxicity (fathead minnow larval growth and survival, ceriodaphnia reproduction)	Contract signed 9/18/98.

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97-N10	Jepson Prairie restoration and conservation plan	Habitat Restoration in Floodplains & Marshes	Solano County Farmlands, Open Space Foundation	Delta	\$244,801	\$244,801	\$0	\$0	\$0	600 ²	Restore habitat. Monitor vegetation/tree survivorship, abundance, size and distribution, pre and post project and comparison to control.	Contract signed 1/28/99.
97-N11	In-Channel Island restoration/demonstration	Habitat Restoration in Floodplains & Marshes	Association of Bay Area Governments	Delta	\$270,270	\$270,270	\$199,594	\$0	\$91,000		Demonstrate effective biotechnical methods to reduce erosion of in-channel islands and adjacent delta island banks. Visual observation of wave and current energy, pre and post project for different application practices for different hydrodynamic conditions. Field mapping and sediment deposition/accretion pre and post project and compare with control. Survey of fish and wildlife use and breeding, including invasive non-native species. Demonstrate that installations can be installed while minimizing impact to existing ecological values. Pre and post project surveys of fisher and terrestrial biota. Survey for vegetation colonization and succession.	Contract signed 7/15/98.
97-N12	Frankie Tract restoration	Habitat Restoration in Floodplains & Marshes	Moffatt and Nichol Engineers, DPR, DWR	Delta	\$231,500	\$231,500	\$51,997		\$370,000	40	Restoration of deeply flooded habitat to tidal perennial aquatic, shaded riverine aquatic, and mid channel island shoal and shoal habitats. TBD - Physical/geomorphological characteristics of islands.	Contract signed 12/29/98.
97-N13	Tyler Island levee protection and habitat restoration pilot project	Habitat Restoration in Floodplains & Marshes	Habitat Assessment & Restoration Team, Inc	Delta	\$695,202	\$695,202	\$273,065	\$0	\$0	6	Evaluate alternative vegetative and biotechnical techniques for restoring and stabilizing levees and bank erosion and riparian and shallow water habitat. Measure boat wake energy dissipation for different installation practices, compare with control. Measure sediment deposition occurring with different installation practices, compare with control and different locations. Survey macroinvertebrate and fishery population for the different installation practices, compare with control and different locations. Survey survival and growth of vegetation between different installation practices, compare with control and different locations.	Contract signed 7/22/98.
97-N14	Cosumnes start-up stewardship and restoration	Habitat Restoration in Floodplains & Marshes	WCB, The Nature Conservancy	Cosumnes River	\$1,975,100	\$1,975,100	\$0	\$0	\$0		Conduct baseline monitoring of riparian vegetation, wildlife, avian and fish resources	Contract signed 6/22/99
97-N16	Bay Point shoreline Restoration Plan	Habitat Restoration in Floodplains & Marshes	East Bay Regional Park District	East Bay	\$185,000	\$185,000	\$0	\$0	\$53,900	52 ²	Restore tidal salt marsh habitat and function. Monitor tidal flow and range over time. Monitor water quality and sedimentation processes over time. Monitor changes in plant species diversity, density and cover. Survey use by fish and wildlife over time.	Contract signed 8/12/98.
97-N18	Cullinan Ranch restoration	Habitat Restoration in Floodplains & Marshes	Ducks Unlimited, Inc.	North Bay	\$368,500	\$368,500	\$0	\$0	\$662,000	1,495 ²	See 97-N16	Contract executed 3/30/99.
97-N19	Tolay Creek restoration	Habitat Restoration in Floodplains & Marshes	Ducks Unlimited, Inc.	North Bay	\$283,000	\$283,000	\$232,090	\$0	\$422,000	312 ²	See 97-N16	Contract and first task order approved by CALFED and signed 10/16/99. Channel modifications complete and levee breached Dec. 1998.
97-N20	Implementing programs to reduce the use of pesticides and fertilizers in Sacramento and San Joaquin watersheds	Water Quality and Temperature	Community Alliance with Family Farmers	Landscape	\$1,680,631	\$1,680,631	\$594,079	\$0	\$0		Increase awareness of users to detrimental impacts and mitigation approaches. User survey on past and post-project application. Evaluate different application techniques and their impact on runoff water quality, develop protocols and models. Water quality and flow measurements in surface water adjacent to tiles. Increase farmer awareness of impacts of pesticide use and alternatives to reduce water quality problems in the Central Valley, and San Joaquin basin.	Contract signed 7/20/98.
97-N21	Knight's Ferry gravel replenishment	Habitat Restoration in Floodplains & Marshes	Cert Mesick Consultants	Stanislaus River	\$536,410	\$536,410	\$191,175	\$0	\$90,000		Improve spawning habitat quality and quantity, and evaluate conditions for successful and durable restoration. Map reach locations and changes over time and under different gravel supply conditions, at various sites. Measure transect and vertical hydraulic gradient during spawning period and after incubation at various sites. Improve incubation habitat and conditions by adding gravel with no fines. Intergravel water temperatures, flows, DO levels, substrate size, fine sediment intrusion at various sites.	Contract signed 9/30/98.
98-N01	RD 2035 Fish Screen	Fish Screen Passage	RD 2035	Sacramento River	\$100,000	\$100,000	\$0	\$0	\$0		Reduce entrainment of outmigrating fish. Measure screen approach, sweep, and bypass flow velocities.	Contract executed 3/31/99.
98-N02	Expanding California Salmon Habitat to Alter Dams and Diversions	Habitat Restoration in Floodplains & Marshes	Institute for Fisheries Resources	Landscape	\$49,000	\$49,000	\$20,146	\$0	\$0		Research project to inventory and develop a mechanism to purchase dams and diversions from willing sellers to improve fish passage	Contract signed 3/12/99.
98-N03	Life History and Stock Composition of Steelhead Trout	Fish Management Hatchery	Yuba Co. Water Agency	Yuba River	\$120,000	\$120,000	\$0	\$0	\$0		Characterization of steelhead habitat and life history patterns in the Yuba River. Trap fish through year, and then measure and collect scale and tissue samples for evaluation. Genetic data for steelhead.	Contract signed 6/9/99.
98-N04	Small Fish Screen Evaluation	Fish Screen Passage	Pelger Mutual Water Company	Sacramento River	\$95,000	\$0	\$0	\$0	\$0		Evaluate the effect of screening small screen diversion. Fyke net and five box sampling at screened and unscreened diversions at various hydraulic and operating conditions.	Contract sent to contractor for signature on 3/29/99. Project delayed due to damage to fish screen.
99-N01	ACID Fish Screen	Fish Screen Passage	Anderson-Cottonwood Irrigation District	Sacramento River	\$5,100,000	\$5,100,000	\$0	\$0	\$0		Reduce entrainment of outmigrating fish. Measure screen approach, sweep, and bypass flow velocities. Evaluate the impact of shallow water restoration actions on water quality. Collect and conduct physical/chemical analysis of water and soil samples.	Contract sent to contractor 7/23/99.
99-N02	Fish Treadmill Developed Fish screen Criteria for Native Sacramento-San Joaquin Watershed Fishes	Fish Screen Passage	UC Davis	Landscape	\$823,000	\$0	\$0	\$0	\$0			
99-N03	East Delta Habitat Corridor (Georgiana Slough)	Habitat Restoration in Floodplains & Marshes	Habitat Assessment & Restoration Team, Inc	Landscape	\$1,100,000	\$0	\$0	\$0	\$0			
99-N04	Lake Red Bluff Riparian Area Restoration & Education Support Project	Habitat Restoration in Floodplains & Marshes	Calif. Coastal Conservancy	Sacramento Mainstem	\$29,114	\$0	\$0	\$0	\$0			

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99-N05	Reintroduction of Endangered Soft Billed Duck to Restored Habitat	Habitat Restoration in Floodplains & Marshes	UC Davis	Suisun Marsh	\$148,627	\$0	\$0	\$0	\$0			
99-N06	Linked Hydrogeomorphic Ecosystem Models to Support Adaptive Management	Habitat Restoration in Floodplains & Marshes	UC Davis	Cosumnes-Mokelumne Basin	\$1,546,016	\$0	\$0	\$0	\$0			
99-N07	Chronic Toxicity of Environmental Contaminants in Sacramento-San Joaquin Delta - A Biomarker Approach	Water Quality and Temperature Improvement	UC Davis	Norse Slough	\$673,684	\$0	\$0	\$0	\$0			
99-N08	Assessment of Pesticide Effects on Fish & Their Food Resources in the Sacramento-San Joaquin Delta	Water Quality and Temperature Improvement	UC Berkeley	Landscape	\$1,568,694	\$0	\$0	\$0	\$0			
99-N09	Effects of Introduced Species of Zooplankton & clams on the Bay-Delta Food Web	Introduced & Undesirable Species	SF State University	Landscape	\$653,384	\$0	\$0	\$0	\$0			
99-N10	Assessing Ecological & Economic Impacts of the Chinese Mitten crab	Introduced & Undesirable Species	UC Berkeley	Bay Area	\$113,033	\$0	\$0	\$0	\$0			
99-N11	Purple Loosestrife Prevention, Detection & Control Actions for the Sacramento-San Joaquin River Delta System	Introduced & Undesirable Species	DFA	Landscape	\$127,473	\$0	\$0	\$0	\$0			
99-N12	Central Valley Steelhead Genetic Evaluation	Improved Fish Management & Hatchery Operations	DFG	Landscape	\$70,636	\$0	\$0	\$0	\$0			
99-N13	Development of a Comprehensive Implementation Plan for a Statistically Designed Marking & Recovery Plan	Improved Fish Management & Hatchery Operations	DFG	Landscape	\$75,951	\$0	\$0	\$0	\$0			
				Total: \$	\$32,428,394	\$25,483,572	\$8,568,847	\$30,000	\$2,379,100			
				37		78%	26%					88%
				Contracts		Obligated	Expended					Executed
Contract Agency: California Urban Water Agencies/ Metropolitan Water District (Stakeholder funds)												
95-M01	Interim Flow Restoration	Environmental Water Acquisition	USFWS	Sacramento Tributaries	\$0	\$0	\$0	\$500,000	\$0		A separate Battle Creek Project recently approved has monitoring. See 95-S16.	Completed.
95-M02	Fish Screen and Ladder Construction	Fish Screen Passage	Durham Mutual	Butte Creek	\$316,500	\$316,500	\$316,500	\$464,720	\$127,031		For Butte Creek system, 100,000 juvenile spring-run have been marked. Also evaluation of fish behavior at ladder entrance was completed.	Completed.
95-M03	Construct Fish Ladder on Parrott-Phelan Dam	Fish Management Hatchery	M&T Ranch/Parrott	Butte Creek	\$0	\$0	\$0	\$100,000	\$316,000		For Butte Creek system, 100,000 juvenile spring-run have been marked.	Completed.
95-M04	Gravel Restoration Project	Habitat Restoration in Floodplains & Marshes	DWR	Sacramento River	\$0	\$0	\$0	\$39,400	\$13,100		Small gravel project. Restore and improve floodplain functions. Restore riparian and wetland vegetation. Monitor vegetation, fish and wildlife populations.	Completed.
95-M05	Pump Station Relocation Construction	Fish Screen Passage	M&T Ranch/Parrott Investments Co.	Sacramento Tributaries	\$1,610,000	\$1,610,000	\$1,610,000	\$2,254,000	\$830,000		A separate AFRP monitoring plan. NMFS monitored velocity on screen face. Improve and restore spawning habitat and durability. Conduct redd counts and other use surveys.	Completed.
95-M06	Implementing programs to reduce the use of pesticides and fertilizers in Sacramento and San Joaquin watersheds (BIOIS)	Water Quality & Temperature Improvements	Community Alliance with Family Farmers	Landscape	\$660,000	\$660,000	\$659,770	\$0	\$0		Monitoring of progress of willingness of farmers to reduce pesticide use is being documented.	Year 2 of 3 year project.
95-M07	Fish Screen Construction	Fish Screen Passage	Suisun Resource Conservation District	Suisun Marsh	\$450,000	\$450,000	\$450,000	\$450,000	\$0		Suisun Resource Conservation District has long-term monitoring program. Reduce entrainment. Measure screen approach, sweep and bypass flow velocities.	Completed.
95-M08	Winter-run Chinook Salmon Captive Broodstock Program	Fish Screen Passage	DWR	Landscape	\$300,000	\$300,000	\$284,000	\$0	\$250,000		Research protocols are peer-reviewed.	Completed.
95-M01	Construct Siphon & Associated Improvements.	Fish Screen Passage	Western Canal Water District	Sacramento Tributaries	\$3,095,873	\$3,095,873	\$2,985,067	\$3,095,873	\$3,265,873		Monitoring plan has been designed and is underway. Reduce entrainment. Measure screen approach, sweep and bypass flow velocities.	Completed.
95-M02	Prospect Island - Shallow Water Habitat/Wetlands Restoration Plan	Habitat Restoration in Floodplains & Marshes	DWR	Delta	\$2,500,000	\$2,500,000	\$0	\$0	\$6,650,000		Design, implement and monitor restoration of shallow water habitat/wetlands on Prospect Island.	Expect contract execution in near future.
95-M03	Riparian Habitat Restoration Verona-Collinsville (Phase 1-Feas.)	Habitat Restoration in Floodplains & Marshes	USGCE	Sacramento River	\$500,000	\$500,000	\$237,725	\$0	\$500,000		Demonstration project will monitor riparian habitat	Completed.
95-M04	Princeton Pumping Plant Fish Screen (Phase 1-Feas.)	Fish Screen Passage	RD 1004	Sacramento River	\$75,000	\$75,000	\$75,000	\$150,000	\$100,000		Reduce entrainment measure screen approach, sweep and bypass flow velocities.	Completed.
95-M05	Fish Screen-Feasibility Engineering	Fish Screen Passage	Princeton-Codomo Glenn / Provident Irrigation Districts	Sacramento River	\$75,000	\$75,000	\$75,000	\$75,000	\$0		Monitoring does not apply to a feasibility study.	Completed.
95-M06	Cosumnes River Preserve (Valentin Ranch Acquisition)	Habitat Restoration in Floodplains & Marshes	The Nature Conservancy	Cosumnes River	\$1,500,000	\$1,500,000	\$1,500,000	\$1,250,000	\$9,250,000	3,300 ¹	Restore and improve floodplain functions. Restore riparian and wetland vegetation. Monitor vegetation, fish and wildlife populations.	Completed.

¹ Acquisition of land where all or part are maintained in existing agricultural use - farmed or grazed.

² Acquisition of existing habitat, or restoration of public lands or existing degraded habitat - No land use change.

CALFED No.	Project Description	Project Category	Applicant	Geo Area	CALFED Approved Funding	CALFED Funds Obligated	CALFED Funds Expended	CVPIA Funding	Other Funding	Acres	Monitoring	Status
96-M07	Fish Screen Construction	Fish Screen Passage	Princeton-Codora Glenn / Provident Irrigation Districts	Sacramento River	\$5,500,000	\$5,500,000	\$3,503,773	\$5,281,200	\$0		Screen will have velocity monitoring. Owner will conduct fyke netting for fish counts.	Completion expected in December 2000.
96-M08	Fish Screen Construction (Phase 2 - Install Additional Screens)	Fish Screen Passage	Suisun Resource Conservation District	Suisun Marsh	\$500,000	\$500,000	\$0	\$500,000	\$0		Suisun Resource Conservation District has long-term monitoring program. Reduce entrainment. Measure screen approach, sweep and bypass flow velocities.	Steering Committee recommended rescinding funds.
96-M09	Sherman Island - Levee Habitat Demonstration Project	Habitat Restoration in Floodplains & Marshes	DWR	Delta	\$480,000	\$480,000	\$76,256	\$0	\$480,000		Riparian habitat will be monitored for growth and endurance.	Bids exceed budget. Steering Committee denied request for additional funding. Proponent evaluating next step.
96-M10	Research to Predict Evolution of Restored Diked Wetlands	Habitat Restoration in Floodplains & Marshes	University of Washington	Delta	\$575,172	\$575,172	\$241,086	\$0	\$0		Project develops conceptual model based on field investigations.	Steering Committee approved additional \$100,172 for additional fisheries and bird field work.
96-M11	Applied Research to Identify Chinook Salmon Runs via Genetics	Fish Management Hatchery	DWR	Landscape	\$450,000	\$450,000	\$0	\$0	\$600,000		Research protocols are peer-reviewed.	Project is underway.
96-M12	Battle Creek - Chinook Salmon & Steelhead Restoration Study	Fish Management Hatchery	BW Kehr Associates	Battle Creek	\$306,000	\$306,000	\$306,000	\$0	\$0		Monitoring is part of a recently approved Battle Creek project. See 98-B16.	Completed.
96-M13	Yolo Bypass - Habitat Restoration Study	Habitat Restoration in Floodplains & Marshes	DWR	Yolo Bypass	\$226,000	\$226,000	\$226,000	\$0	\$30,800		Restore and improve floodplain functions. Restore riparian and wetland vegetation. Monitor vegetation, fish and wildlife populations.	Project assigned to NFWF. Project completed.
96-M14	Clear Creek - Property Acquisition	Habitat Restoration in Floodplains & Marshes	Western Shasta RCD	Clear Creek	\$211,000	\$211,000	\$211,000	\$211,000	\$0	120	Restore and improve floodplain functions. Restore riparian and wetland vegetation. Monitor vegetation, fish and wildlife populations.	Project assigned to NFWF. Project completed.
96-M15	Intro. of Non-Indigenous Aquatic Species Research Program	Introduced & Undesirable Species	San Francisco Estuary Institute	Landscape	\$197,000	\$197,000	\$184,650	\$0	\$0		Reports are peer-reviewed.	90% complete.
96-M16	Sacramento River and Major Trib. Corridor Mapping Project	Habitat Restoration in Floodplains & Marshes	CSU, Chico	Sacramento River	\$145,200	\$145,200	\$61,342	\$0	\$0		Products meet mapping standards.	80% complete.
96-M17	Yuba River Fish Screen Replacement	Fish Screen Passage	Browns Valley Irrigation District	Yuba River	\$114,750	\$114,750	\$80,857	\$114,750	\$116,500		Reduce entrainment. Measure screen approach, sweep and bypass flow velocities.	95% complete.
96-M18	Determine Effects of Toxics	Water Quality & Temperature Improvements	Phyllis Fox & Associates	Landscape	\$110,000	\$110,000	\$16,000	\$0	\$0		Project terminated.	Agreement could not be reached on project scope.
96-M19	Wilkins Slough - Fish Screen Prelim. Design	Fish Screen Passage	RD 108	Sacramento River	\$100,000	\$100,000	\$100,000	\$100,000	\$16,300		Monitoring does not apply to a feasibility study.	Completed.
96-M20	Fish Screen Project	Fish Screen Passage	Banta-Carbena Irrigation District	San Joaquin River	\$100,000	\$100,000	\$0	\$1,016,750	\$0		Reduce entrainment of outmigrating and resident fish. Measure screen approach, sweep and bypass flow velocities.	Funding rescinded by mutual consent due to timing.
96-M21	Adams Dam Fish Screen & Ladder	Fish Screen Passage	El Escalon Ranch	Butte Creek	\$70,304	\$70,304	\$70,301	\$0	\$50,000		Draft monitoring plan for physical and biological monitoring has been completed by owner. Reduce entrainment. Measure screen approach, sweep and bypass flow velocities.	Completed.
96-M22	Gerrill Dam Fish Screen & Ladder	Fish Screen Passage	Gerrill Ranch	Butte Creek	\$67,990	\$67,990	\$61,191	\$0	\$56,500		Draft monitoring plan for physical and biological monitoring has been completed by owner. Reduce entrainment. Measure screen approach, sweep and bypass flow velocities.	Completed.
96-M23	Innovative Fish Screen for Small Diversion Demonstration Project	Fish Screen Passage	Jim Buell & Associates	Landscape	\$90,000	\$90,000	\$51,773	\$0	\$0		Research protocols are peer-reviewed.	Project will be complete at 60% of work due to ESA concerns.
96-M24	Butte Creek - Watershed Management Strategy Plan	Watershed Management	CSU, Chico	Butte Creek	\$83,000	\$83,000	\$57,722	\$0	\$83,000		Existing conditions report and recommendation for future action including monitoring.	90% complete.
96-M25	Battle Creek - Chinook Salmon & Establish Watershed Conservancy	Watershed Management	Western Shasta RCD	Battle Creek	\$50,000	\$50,000	\$40,104	\$50,000	\$0		Monitoring is part of a recently approved Battle Creek project. See 98-B16.	50% complete.
96-M26	Prospect Island - Develop Monitoring Plan	Habitat Restoration in Floodplains & Marshes	DWR	Delta	\$35,000	\$35,000	\$35,000	\$0	\$0		Monitoring plan is complete.	Completed.
96-M27	North Delta Area - Juvenile Salmon Rearing	Habitat Restoration in Floodplains & Marshes	CSU, Sacramento	Delta	\$24,500	\$24,500	\$19,048	\$0	\$0		Inventory of rearing habitat for fisheries, including fisheries surveys.	Field work complete.
97-M01	Wilson Ranch screen	Fish Screen Passage	Deseret Farms of Calif.	Sacramento Mainstem	\$200,000	\$0	\$0	\$0	\$0		Reduce entrainment of outmigrating fish. Measure screen approach, sweep, and bypass flow velocities.	Draft contract sent to Deseret Farms of California.
97-M02	Battle Creek screens and fish passage	Fish Screen Passage	DWR	Battle Creek	\$395,000	\$395,000	\$0	\$0	\$0		See 98-B16	DWR has completed first phase of work; remaining work in progress.
97-M03	Gerrill Dam screen and ladder	Fish Screen Passage	Gerrill Land Company	Butte Creek	\$369,641	\$369,641	\$332,577	\$755,948	\$268,318		Reduce entrainment of outmigrating fish. Measure screen approach, sweep, and bypass flow velocities. Increase upstream passage of returning adults.	Project is complete.
97-M04	Adams Dam screen and passage	Fish Screen Passage	Ducks Unlimited, Inc.	Butte Creek	\$217,000	\$217,000	\$216,892	\$508,192	\$171,000		Increase upstream passage of returning adults. Monitoring of fish behavior at the entrance of and movement through the ladder. Reduce entrainment of outmigrating fish. Measure screen approach, sweep, and bypass flow velocities.	Project is complete.
97-M05	Sadlir Dam Fish Passage	Fish Screen Passage	Townsend Flat Water Ditch Company	Clear Creek	\$138,200	\$0	\$0	\$0	\$0		Increase upstream passage of returning adults. Monitoring of fish behavior at the entrance of and movement through the ladder. Reduce entrainment of outmigrating fish. Measure screen approach, sweep, and bypass flow velocities.	USBR undertaking environmental and permitting tasks; so CLWA's funding for this project was reduced by about \$100,000. Project on hold until negotiations between Townsend Flat Water Ditch Co. and USBR regarding water rights are concluded.

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97-M06	Hastings Tract screen feasibility study	Fish Screen Passage	Hastings Island Land Company	Delta	\$27,000	\$0	\$0	\$0	\$0		Reduce entrainment of outmigrating fish. Measure screen approach, sweep, and bypass flow velocities. Increase upstream passage of returning adults.	Draft contract being prepared.
97-M07	Banta-Carbena fish screen	Fish Screen Passage	Banta-Carbena Irrigation District	San Joaquin Mainstem	\$938,875	\$0	\$0	\$0	\$0		Reduce entrainment of outmigrating fish. Measure screen approach, sweep, and bypass flow velocities. Increase upstream passage of returning adults.	Received proponents indication of desire to proceed. Contract under preparation.
97-M08	Tuolumne River channel restoration (Pool 9)	Fish Screen Passage	Turlock Irrigation District	Tuolumne River	\$2,353,100	\$0	\$0	\$0	\$0		Increase survival of outmigrating smolts. Monitor temperature and water quality, pre and post project. Conduct mark/recapture experiments. Protect and restore spawning habitats and their durability. Monitor flows and geomorphic and channel characteristics pre and post project. Survey spawning activity, pre and post project.	Negotiating a change of scope for review by CALFED.
97-M09	Tuolumne River setback levees and channel restoration	Habitat Restoration in Floodplains & Marshes	Turlock Irrigation District	Tuolumne River	\$2,801,000	\$0	\$0	\$3,382,000	\$50,000		Increase survival of outmigrating smolts. Monitor temperature and water quality, pre and post project. Conduct mark/recapture experiments. Protect and restore spawning habitats and their durability. Monitor flows and geomorphic and channel characteristics pre and post project. Survey spawning activity, pre and post project.	Negotiating a change of scope for review by CALFED.
				Total:	\$	\$2,958,105	\$2,149,930	\$14,084,744	\$28,689,833	\$23,225,622		
				44			77%					77%
				Contracts		Obligated	Expended					Executed
Contract Agency: U.S. Bureau of Reclamation (Federal funds)												
97-B01	Watershed improvements/sediment stabilization (Deer, Mill, Antelope Creeks)	Watershed Management	USFS	Deer, Mill, Antelope Creeks	\$371,000	\$371,000	\$121,360	\$0	\$69,000		Existing long-term condition monitoring program in-place	Contract executed 3/10/98.
97-B02	Sedimentation movement and availability and monitoring in the Delta	Habitat Restoration in Floodplains & Marshes	USGS	Delta	\$1,046,200	\$1,046,200	\$242,800	\$0	\$0		Describe the movement and availability of sediment in the Delta, as needed for habitat restoration. Monitor sediment transport (suspended load and bedload) at several locations.	Contract executed 3/16/98 for \$587,000. Contract executed 5/21/98 for \$460,000.
97-B03	Liberty Island acquisition	Habitat Restoration in Floodplains & Marshes	USFWS	Delta	\$8,577,000	\$8,577,000	\$240,000	\$25,000	\$0	4,760 ¹	Protect and restore tidally influenced wetlands, riparian corridors, and upland habitats. Measure distribution of habitats and species populations.	Contract executed 3/11/98. NEPA documentation underway. Acquisition expected by 10/31/99.
97-B04	Acquisition and restoration of Refuge lands (SJRNWR)	Habitat Restoration in Floodplains & Marshes	USFWS	San Joaquin Mainstem	\$10,647,000	\$10,647,000	\$1,717,274	\$0	\$9,353,000	6189 ¹	Protect and restore lands, riparian corridors, and other wetland habitats. Measure distribution of habitats and species populations.	Contract executed 3/11/98. One parcel acquired, appraisals underway on other parcels. Closure expected in Sept.
97-B05	Bear Creek floodplain restoration demonstration project (SJNWR)	Habitat Restoration in Floodplains & Marshes	USFWS	San Joaquin River	\$334,000	\$334,000	\$331,408	\$0	\$80,000	1326 ²	Protect and enhance riparian, floodplain and wetland habitats. Measure distribution of habitats and species populations.	Contract executed 3/14/98.
97-B06	Assessment of organic matter in the habitat and its relationship to the food chain	Habitat Restoration in Floodplains & Marshes	USGS	Landscape	\$1,440,648	\$1,650,648	\$413,842	\$0	\$0		Evaluate habitat influences on the production and utilization of organic matter as food source in the Delta, and improve modeling capabilities. Obtain or measure food quality and quantity from various locations and habitat types.	Contract executed 3/16/98 for \$517,000. Contract executed 7/22/98 for \$833,000.
98-B01	Richter Brothers screen	Fish Screen Passage	Richter Brothers	Sacramento Mainstem	\$49,000	\$49,000	\$0	\$0	\$0		Reduce entrainment of outmigrating fish. Measure screen approach, sweep, and bypass flow velocities.	Executed 6/5/98.
98-B02	Boeger Family Farm screen - Feasibility Study	Fish Screen Passage	Boeger Family Farms	Sacramento Mainstem	\$15,000	\$15,000	\$13,811	\$0	\$0		Reduce entrainment of outmigrating fish. Measure screen approach, sweep, and bypass flow velocities.	Executed 8/18/98.
98-B03	ACID fish passage	Fish Screen Passage	Anderson-Cottonwood Irrigation District	Sacramento Mainstem	\$325,000	\$325,000	\$325,000	\$0	\$50,000		Reduce entrainment of outmigrating fish. Measure screen approach, sweep, and bypass flow velocities.	Executed 6/5/98.
98-B05	Sand and Salt Creek watershed project	Water Quality and Temperature	Colusa County Resource Conservation District	Colusa Basin	\$598,633	\$598,633	\$39,744	\$0	\$1,508,000		Evaluate different application practices and vegetation conditions on impact to level of surface runoff of OP pesticides and sediments. Water quality and flow measurements in runoff adjacent to sites. Evaluate if stable grade conditions will reduce erosion. Site erosion monitoring, pre and post project.	Executed 9/24/98.
98-B07	Evaluation of selenium sources, levels, and consequences in the Delta.	Water Quality and Temperature	USGS	Delta	\$1,588,709	\$1,588,709	\$268,168	\$0	\$1,190,655		Evaluate sources of selenium at various times and locations. Collect and analyze water column samples. Evaluate impact of selenium on critical prey/indicator species at various times and locations, and relate to impacts on species of concern. Collect and analyze selected prey/indicator species. Measure levels and kinetics in species of concern under controlled uptake conditions.	Interagency contract executed 8/12/98.
98-B08	Cache Slough habitat enhancement	Habitat Restoration in Floodplains & Marshes	RD No. 2060	Delta	\$85,000	\$85,000	\$0	\$0	\$0	9 ²	Restoration of levee using environmentally friendly approaches. Sediment deposition/accretion and topographic surveys, pre and post project. Survey of vegetation survivorship, diversity and growth at various increments of time.	Executed 6/2/98.
98-B09	IPM Partnership to Improve Water Quality in Suisun Bay and Local Creeks	Water Quality and Temperature	Central Contra Costa Sanitary District	Delta	\$286,000	\$286,000	\$16,007	\$0	\$191,000		Increase awareness of users to detrimental impacts and mitigations approaches. User survey on participation, value, and product sales pre and post implementation. Reduce the runoff levels as a result of implementation. Concentration of OP pesticides in influent of waste water, and may have urban creek water quality measurements, and compare pre and post project.	Executed 8/20/98.
98-B10	Inventory of forest road systems, Cat Creek Watershed	Watershed Management	USFS	Cosumnes River	\$38,000	\$38,000	\$0	\$0	\$0		Develop watershed restoration plan to reduce erosion. Monitor aquatic habitat and channel characteristics, water chemistry and species population/use.	Executed 8/5/98.
98-B11	Woodbridge fish screen and passage	Fish Screen Passage	Woodbridge Irrigation District	Mokelumne River	\$1,575,000	\$1,575,000	\$124,581	\$0	\$0		Increase upstream passage of returning adults. Reduce entrainment of outmigrating fish. Measure screen approach, sweep, and bypass flow velocities.	Executed 6/30/98.
98-B13	Napa River Wetlands acquisition	Habitat Restoration in Floodplains & Marshes	Napa County Land Trust	Northbay	\$1,000,000	\$1,000,000	\$910,000	\$0	\$0	955	Protect and restore native marsh wetland habitat. Monitor vegetation, fish and wildlife populations.	Executed 9/24/98.
98-B14	Bacterial treatment of Selenium in the Panoche Drainage	Water Quality and Temperature	UC Berkeley	San Joaquin Mainstem	\$1,148,328	\$1,148,328	\$165,293	\$0	\$0		Demonstrate the effectiveness of microalgae as a substrate for nitrate and selenium reduction in agricultural discharge water. Treatment effectiveness and operational issues. Costs of process, to estimate costs for full scale operation.	Executed 9/9/98.

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99-B02	Lower Butte Creek Project Phase II (DA2)	Fish Screen Passage	Ducks Unlimited, Inc.	Butte Creek	\$775,000	\$0	\$0	\$0	\$0		Increase upstream passage of returning adults. Reduce entrainment of outmigrating fish.	Contract being prepared.
99-B03	ACID Fish Passage and Fish Screen Improvement Project, Phase III (DA3)	Fish Screen Passage	Anderson-Cottonwood Irrigation District	Sacramento Mainstem	\$5,253,000	\$0	\$0	\$0	\$0		Increase upstream passage of returning adults. Reduce entrainment of outmigrating fish. Measure screen approach, sweep, and bypass flow velocities. Evaluate the impact of shallow water restoration actions on water quality. Collect and conduct physical/chemical analysis of water and soil samples.	Contract being prepared.
99-B04	Merced River Salmon Habitat Enhancement; Lower Slone (DA5)	Habitat Restoration in Floodplains & Marshes	DWR	Merced River	\$150,000	\$0	\$0	\$0	\$0		Reduce entrainment of outmigrating fish. Measure temperature and fish distribution and abundance.	Contract being prepared.
99-B05	Merced River Salmon Habitat Enhancement; Ratzliff Reach (DA6)	Habitat Restoration in Floodplains & Marshes	DWR	Merced River	\$1,633,000	\$0	\$0	\$0	\$0		Same as 99-B04	Contract being prepared.
99-B06	Assessment of Ecological and Human Health Impacts of Mercury in the Bay-Delta Watershed	Water Quality and Temperature	CSU, San Jose	Landscape	\$3,800,000	\$0	\$0	\$0	\$710,000		Determine bioavailable sources of mercury in the Bay-Delta Watershed. Obtain data on mercury levels in fish and complete pilot mine remediation feasibility studies.	Contract being prepared.
99-B07	Fish Passage Improvement Project at the Red Bluff Diversion Dam	Fish Screen Passage	Tehama-Colusa Canal Authority	Sacramento Mainstem	\$1,030,000	\$0	\$0	\$0				
99-B08	Improve Upstream Ladder & Barrier Weir @ Coleman Nat'l Fish Hatchery at Battle Creek	Fish Screen Passage	USFWS	Battle Creek	\$1,713,302	\$0	\$0	\$0				
99-B09	Development of Implementation Plan for Lower Yuba River Adakomous Fish Habitat Restoration	Habitat Restoration in Floodplains & Marshes	Surface Water Resources, Inc.	Yuba River	\$176,130	\$0	\$0	\$0				
99-B10	Species & Community Profiles of the SF Bay Area Wetlands Ecosystem Goals Project	Habitat Restoration in Floodplains & Marshes	Friends of S.F. Estuary	Bay Area	\$45,320	\$0	\$0	\$0				
99-B11	South Napa River Tidal Slough & Floodplain Restoration Project	Habitat Restoration in Floodplains & Marshes	City of American Canyon	Napa	\$1,565,600	\$0	\$0	\$0				
99-B12	Riparian Corridor Acquisition & Restoration Assessment	Habitat Restoration in Floodplains & Marshes	USBLM	Sacramento Mainstem	\$2,240,250	\$0	\$0	\$0		1920 ¹		
99-B13	Understanding Tidal Marsh Restoration Processes & Patterns	Habitat Restoration in Floodplains & Marshes	Univ. of Washington	SF Bay Area	\$1,073,513	\$0	\$0	\$0				
99-B14	Biological Ag Systems in Cotton-BASIC-Reducing Synthetic Pesticides & Fertilizers in the N. SJ Vly	Watershed Management	Sustainable Cotton Project	San Joaquin Mainstem	\$473,800	\$0	\$0	\$0				
99-B15	Douglas-Long Canyon Paired - Watershed Project	Watershed Management	Placer Co Water Agency	American River	\$86,108	\$0	\$0	\$0				
99-B16	Determination of the Causes of Dissolved Oxygen Depletion in the SJ River	Water Quality and Temperature Improvements	DWR	San Joaquin Mainstem	\$892,400	\$0	\$0	\$0				
99-B17	Dissolved Organic Carbon Release from Delta Wetlands, Part 1	Water Quality and Temperature Improvements	USGS	Landscape	\$1,434,449	\$0	\$0	\$0				
99-B18	Evaluation of Potential Impacts of Chinese Mitten crab on Benthic Comm. in the Delta	Introduced or Undesirable Species Control	DWR	Landscape	\$152,233	\$0	\$0	\$0				
99-B19	Health Monitoring of Hatchery & Natural Fall-run Chinook in SJ River	Improved Fish Management at Hatchery Operations	USFWS	San Joaquin Mainstem	\$38,996	\$0	\$0	\$0				
99-B20	Sacramento River Discovery Center	Education	Sacramento River Discovery Center	Sacramento Mainstem	\$39,552	\$0	\$0	\$0				
99-B21	Estuary Action Challenge Environmental Education Project	Education	Earth Island Institute	Landscape	\$51,500	\$0	\$0	\$0				
99-B22	Water Challenge 2010 Exhibit	Education	USCOE	Landscape	\$52,013	\$0	\$0	\$0				
99-B23	The Learning Watershed Project	Education	American River Watershed Institute	American River	\$56,907	\$0	\$0	\$0				
99-B24	Traveling Film Festival Exhibit	Education	Independent Documentary Group	Landscape	\$51,500	\$0	\$0	\$0				
99-B25	River Studies Center Exhibits & Programs	Education	SJ River Parkway & Conservation Trust	San Joaquin Mainstem	\$70,467	\$0	\$0	\$0				
99-B26	1999/2000 Bay-Delta Education Program	Education	Water Education Foundation	Landscape	\$33,269	\$0	\$0	\$0				
99-B27	Watershed Educational Training	Education	Colusa County Resource Conservation District	Sacramento Tributaries	\$13,790	\$0	\$0	\$0				

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99-B28	Prospect Island Monitoring Project	Habitat Restoration in Floodplains & Marshes	DWR	Delta	\$915,000	\$0	\$0	\$0	\$0	\$0	Restore 1,300 acres of shallow water habitat. Monitor fish, wildlife, water quality, vegetation, sediments, nutrients and benthic communities.	Contract being prepared.
99-B29	San Joaquin River Pilot Project	Environmental Water Acquisition	Priant Water Users Authority		\$2,500,000	\$0	\$0	\$0	\$0			Contract being prepared.
99-B30	Water Acquisition	Environmental Water Acquisition	Oakdale & S. San Joaquin I.D.		\$3,000,000	\$0	\$0	\$0	\$0			Contract being prepared.
				Total:	\$5,415,000	\$36,873,071	\$8,878,684	\$635,000	\$16,683,660			
				70		39%	9%					87%
				Contracts		Obligated	Expended					Executed
Contract Agency: US Environmental Protection Agency (Federal funds)												
97-E01	Watershed Plan (Big Chico Creek) (F219)	Watershed Management	Big Chico Creek Watershed Alliance	Big Chico Creek	\$295,313	\$295,313	\$118,125				Reduce impacts of past and ongoing land use practices to enhance aquatic habitats. Conduct riparian and geomorphic surveys, pre and post project.	\$127,517 will be obligated in April. EPA watershed funds.
97-E02	Watershed Planning (Deer Creek) (F237)	Watershed Management	Deer Creek Watershed Conservancy, CSU Chico	Deer Creek	\$196,554	\$196,554	\$78,822		\$231,000		Reduce land use practices detrimental to aquatic environments. Monitor water quality.	Executed.
98-E01	Napa River Watershed (M92)	Watershed Management	Napa County Resource Conservation District	Northbay	\$252,000	\$252,000	\$213,317	\$0	\$0		Protect and enhance the riparian and riverine habitats. Monitor habitat characteristics, geomorphology and bank stability, flow/runoff, species assessments, and water quality. Facilitate broadbased local stakeholder group in development of watershed plan. Develop river model to assess alternative scenarios. Collect flow and channel/geomorphology data.	Executed 5/29/98.
98-E02	Sonoma Creek Watershed (M113)	Watershed Management	Southern Sonoma County Resource Conservation District	Northbay	\$302,000	\$302,000	\$115,825	\$0	\$0		Protect and enhance the riparian and riverine habitats. Monitor riverine conditions: gravel, temperature, Riparian monitoring and non native control. Implement environmentally-responsible vineyard management practices. Monitor water quality and habitat characteristics. Increase public awareness of issues and needs of aquatic and terrestrial natural resources. Increase upstream passage of returning adults.	Executed 5/29/98.
98-E03	Regional Wetlands Goals Project (M130)	Habitat Restoration in Floodplains & Marshes	San Francisco Estuary Institute	Northbay	\$76,000	\$76,000	\$0	\$0	\$200,000		Evaluate restoration and rehabilitation needs of region.	Completed.
98-E04	Petaluma River Watershed Restoration Program (G1014)	Watershed Management	Southern Sonoma County Resource Conservation District	Northbay	\$220,000	\$220,000	\$0	\$0	\$0		Evaluate and implement restoration and rehabilitation needs of the region.	Executed 5/13/99
98-E05	Cottonwood Creek Watershed Group Formation (G1015)	Watershed Management	Cottonwood Creek Watershed Group	Cottonwood Creek	\$161,000	\$161,000	\$20,413	\$0	\$0		Facilitate broadbased local stakeholder group in development of watershed plan. Evaluate restoration needs of region.	Executed on 5/11/99
98-E06	Battle Creek Watershed Stewardship (G1016)	Watershed Management	Battle Creek Watershed Conservancy	Battle Creek	\$145,000	\$145,000	\$0	\$0	\$0		Facilitate broadbased local stakeholder group in development of watershed plan. Improve watershed practices to reduce detrimental impacts on aquatic habitats.	EPA executed a cooperative agreement with NFWF in February to manage these 14 watershed projects. A NFWF sub-agreement is expected.
98-E07	Local Watershed Stewardship: Steadhead Trout Plan (G1022)	Watershed Management	Friends of Corte Madera Creek Watershed	Northbay	\$47,500	\$47,500	\$4,255	\$0	\$0		Develop steedhead restoration plan. Collect fish habitat and population information and thermograph data.	Executed on 4/2/99.
98-E08	Cold Water Fisheries and Water Quality Element (G1023)	Watershed Management	City of San Jose-Environmental Services Department	Other	\$200,000	\$200,000	\$0	\$0	\$0	16	Evaluate restoration needs of region.	EPA executed a cooperative agreement with NFWF in February to manage these 14 watershed projects. A NFWF sub-agreement is expected.
98-E09	Merced River Corridor Restoration Plan (G1026)	Watershed Management	Subwater Sciences & Merced Co. Planning & Comm. Develop. Dept.	Merced River	\$300,000	\$300,000	\$0	\$0	\$0		Facilitate broadbased local stakeholder group in development of watershed plan. Evaluate restoration needs of region.	Executed 5/25/99
98-E10	South Yuba River Coordinated Watershed Management Plan (G1029)	Watershed Management	DPR	Yuba River	\$264,000	\$264,000	\$0	\$0	\$0		Facilitate broadbased local stakeholder group in development of watershed plan. Evaluate restoration needs of region.	Executed 5/13/99
98-E11	Watershed Restoration Strategy for the Yolo Bypass (G1033)	Watershed Management	Yolo Basin Foundation, Inc.	Delta	\$244,188	\$244,188	\$23,430	\$0	\$0		Facilitate broadbased local stakeholder group in development of watershed plan. Evaluate restoration needs of region.	Executed.
98-E12	Proposal to Develop Local Watershed Stewardship Plan for the Lower Mokelumne River (G1038)	Watershed Management	San Joaquin County Resource Conservation District	Mokelumne River	\$159,000	\$159,000	\$53,344	\$0	\$0		Facilitate broadbased local stakeholder group in development of watershed plan. Evaluate restoration needs of region.	Executed 4/9/99
98-E13	Union School Slough Watershed Improvement Program (G1040)	Watershed Management	National Audubon Society - California	Yolo Basin	\$636,000	\$636,000	\$31,376	\$0	\$0		Develop and implement riparian restoration project on farms. Water quality and habitat surveys.	Executed 5/25/99
98-E14	American River Integrated Watershed Stewardship Strategy (G1047)	Watershed Management	Placer County Resource Conservation District	American River	\$220,750	\$220,750	\$0	\$0	\$0		Evaluate restoration needs of region.	Executed

¹ Acquisition of land where all or part are maintained in existing agricultural use - farmed or grazed.

² Acquisition of existing habitat, or restoration of public lands or existing degraded habitat - No land use change.

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1 Acquisition of land where all or part are included in existing agricultural use - farmed or grazed.
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CALFED No.	Project Description	Project Category	Applicant	Geo Area	CALFED Approved Funding	CALFED Funds Obligated	CALFED Funds Expended	CVRA Funding	Other Funding	Acres	Monitoring	Status	
98-F16	Fern-Hatched Tidal Fenway Aquatic and Shaded River Aquatic Conservation Project (C1025)	Habitat Restoration in Floodplains & Marshes (U & L Farms, LLC)	Delta		\$425,000	\$425,000	\$0	\$0	\$0	168 ¹	Project will protect riparian and tidal shallow water habitat. Survey for fish and wildlife use.	Executed. Property approval, acquisition and Contaminant surveys being completed.	
98-F17	Bonita Wetland Marsh Restoration (C1025)	Habitat Restoration in Floodplains & Marshes	City of Bonita	Suisun Marsh	\$59,000	\$59,000	\$0	\$0	\$0	8 ²	Restore tidal action to salt marsh habitat to provide tidal estuarine emergent wetlands. Survey target wetland vegetation and removal of exotic plants. Survey for fish and wildlife use.	Executed. Contracts being executed with consultants.	
98-F18	Monitoring on the Sacramento River (C1028)	Habitat Restoration in Floodplains & Marshes	The Nature Conservancy	Sacramento	\$1,000,000	\$1,000,000	\$0	\$0	\$0	500	Develop projectwide monitoring to assess channel meander and habitat restoration. Survey geomorphologic processes and floodplain habitat response.	Executed.	
98-F19	Painting and Demonstration (C1032)	Habitat Restoration in Floodplains & Marshes	The Nature Conservancy	Cosumnes River	\$750,000	\$750,000	\$0	\$0	\$0	600 ¹	Acquire and restore floodplain and wetland habitat and functions. Monitor habitat characteristics and species use.	Executed.	
98-F20	Deer and Mill Creeks Acquisition and Enhancement (C1033)	Habitat Restoration in Floodplains & Marshes	The Nature Conservancy	Deer, Mill Creeks	\$1,000,000	\$1,000,000	\$0	\$0	\$0	2,500 ¹	Increase native riparian growth adjacent to the river. Measure tree density and species composition and height, girth and post project.	Executed. Acquisition negotiations initiated.	
98-F21	Lower San Joaquin River Floodplain Restoration Project (C1038)	Habitat Restoration in Floodplains & Marshes	USFWS, San Luis National Wildlife Refuge	San Joaquin River	\$1,100,000	\$1,100,000	\$0	\$0	\$0	\$4,799,000	303	Protect and enhance riparian and floodplain habitats. Baseline habitat and wildlife surveys. Habitat mapping.	Funds transferred to USFWS, San Luis NWR Complex. Implementation begun.
98-F22	Biological Restoration and Monitoring in the Suisun Marsh/North San Francisco Bay Ecological Zone (C1042)	Habitat Restoration in Floodplains & Marshes	CSU, Hayward	Suisun Marsh	\$772,667	\$772,667	\$55,374	\$0	\$0	\$243,812	272 ²	Restore emergent and harvested marshland. Monthly monitoring for sedimentation, water quality, vegetation, fish and avian use and populations, and planktonic foods.	Agreement signed by Cooperator 14/99. Implementation begun.
98-F23	South Napa River Tidal Slough and Floodplain Restoration Project (C1044)	Habitat Restoration in Floodplains & Marshes	City of American Canyon	Northbay	\$1,455,000	\$1,455,000	\$12,891	\$0	\$0	\$718,000	519 ²	Monitor return of tidal flows, recolonization of native plants, survival of riparian vegetation and fish utilization.	Executed. Acquisition Appraisal Report sent to Realty for review on 8/2/99. Wetlands definition completed.
98-F24	Buena Vista Creek Riparian Restoration (C1046)	Habitat Restoration in Floodplains & Marshes	CSU, Chico	Buena Vista Creek	\$76,348	\$76,348	\$693	\$0	\$0	\$0		Monitor riparian success. Bioassessment of benthic invertebrates. Water quality monitoring. Wildlife inventories.	Executed. Planning and designing for restoration, trails and signing underway using Research Foundation employees.
99-F25	Exotic Species Control Program	USFWS	Landscape		\$1,250,000	\$1,250,000	\$33,838	\$0	\$0	\$0		CALFED has developed this program to identify and implement projects addressing exotic species control.	Projects under this program will be selected through the current RFP.
99-F01	Restore Special Run Pool 10 Reach (C9A7)	Habitat Restoration in Floodplains & Marshes	USFWS	Yuba River	\$168,000	\$0	\$356,000	\$0	\$0	\$0		Monitor physical habitat changes, survival of riparian vegetation and fish population changes, post restoration.	Contract being prepared.
99-F02	Restore Mill Slough Reach (C9A8)	Habitat Restoration in Floodplains & Marshes	USFWS	Yuba River	\$3,332,000	\$0	\$0	\$0	\$0	\$0		Monitor physical habitat changes, survival of riparian vegetation and fish population changes, post restoration.	Contract being prepared.
99-F03	Restore habitat on McCormack-Williamson Weirs (C9A12)	Habitat Restoration in Floodplains & Marshes	The Nature Conservancy	Delta	\$860,000	\$0	\$0	\$0	\$0	\$250,000		Monitor riparian vegetation, wildlife, avian and fish resources.	Proponent expects to sign option 4/99.
99-F04	McCormack-Williamson Tidal Acquisition (F1-307)	Habitat Restoration in Floodplains & Marshes	The Nature Conservancy	Delta	\$5,250,000	\$0	\$0	\$0	\$0	\$0	1655 ¹		Proponent expects to sign option 4/99.
99-F05	Non-native Invasive Species Advisory Council	USFWS	Landscape		\$50,000	\$0	\$0	\$0	\$0	\$0			
99-F06	Reducing Risk of Invasions and Distribution on Non-native Invasive Species Through Outreach & Education	UC Davis	Landscape		\$105,465	\$0	\$0	\$0	\$0	\$0			
99-F07	Zebra Mussel Detection & Outreach Project	DWR	Landscape		\$100,000	\$0	\$0	\$0	\$0	\$0			
99-F08	Purple Loosestrife Prevention, Detection & Control in the Suisun Delta & Associated Hydrologic Units	DFA	Landscape		\$201,306	\$0	\$0	\$0	\$0	\$0			
99-F09	Reduced Spawning Erosion Project	California Conservation	Landscape		\$250,000	\$0	\$0	\$0	\$0	\$0			
99-F10	Practical Guidebook to Prevent & Control Invasions of the Bay-Delta Ecosystem	SFEI	Landscape		\$76,750	\$0	\$0	\$0	\$0	\$0			
99-F11	Effects of Invasions on the Food Supply of Bay-Delta Fishes	San State University	Landscape		\$100,000	\$0	\$0	\$0	\$0	\$0			
Contract Agency: US Army Corps of Engineers (Federal funds)													
1%													
45%													

CALED No.	Project Description	Project Category	Applicant	Geo Area	CALED Approved Funding	CALED Funds Obligated	CALED Funds Expended	CVPIA Funding	Other Funding	Acres	Monitoring	Status
55-401	Project Island Habitat Protection Project	Habitat Restoration in Floodplains & Marshes		Delta	\$2,000,000	\$2,000,000	\$1,650,045	\$0	\$0		Repair levee breach and pump out island	Project completion.
55-402	Flood Control Bypass Habitat Program	Habitat Restoration in Floodplains & Marshes		Delta	\$1,200,000	\$1,200,000	\$10,696	\$0	\$0		CALED has identified this program to fund Flood Control Bypass habitat projects. They are now developing a strategy for implementation.	Developing strategy. Projects under this program will be selected through the current PSP.
59-401	Initiation of a Section of the Yolo Bypass to Restore Sacramento Special & Other Native Species	Habitat Restoration in Floodplains & Marshes	Natural Heritage		\$200,679	\$0	\$0	\$0	\$0			
				Total: \$	\$4,020,679	\$3,200,000	\$2,049,640	\$0	\$0			33% Executed
				Contracts	3	80%	51%					
						Obligated	Expended					
55-401	Small Duration Fish Screen Program	Fish Screen Passage	NRCS	Delta	\$900,000	\$900,000	\$0	\$0	\$0		Reduce entrapment of outmigrating and resident fish. Measure screen approach, sweep and bypass flow velocities.	Funds will be used to complete existing projects. New projects will be recruited through NRCS process.
55-401	Floodplain Easements Lower Truckee and San Joaquin (DAS)	Habitat Restoration in Floodplains & Marshes		San Joaquin River	\$1,545,000	\$0	\$0	0	\$1,500,000	1,200	Acquire and restore areas prone to flood damage. Monitor vegetation and wildlife populations.	Contract being prepared
				Total: \$	\$2,445,000	\$900,000	\$0	\$0	\$1,500,000			0% Executed
				Contracts	2	37%	0%					
						Obligated	Expended					
				Total: \$	\$218,744,887	\$127,945,572	\$39,040,977	\$32,076,592	\$55,470,335			
						59%	18%					
						Obligated	Expended					

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